

Split

shp July 15

Work Order ID 60162-1



June 28, 2010 11:49:19 AM

Page 1

Item ID: D4132-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearplate, L11 Fwd

Start Date: 6/29/10 Start Qty: 2.00

Required Date: 7/15/10 Req'd Qty: 2.00



Cust Item ID:

Customer:

Reference:

Approvals: Process Plan:

Date: 10-6-79 Tooling:

Date:

Run Start



QC:

Date: SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D4132

A

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut D4132, 1F as per Dwg D4132

Dwg Rev: A

Prog Rev: A

2-Deburr if necessary

Deburr = 7 m. h. 6/29/29

(3X)

1310-6-79

(3)

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

1310-6-79

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

8 whole/30

(+3)

270

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	App Chief Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Work Order ID 60162

Wednesday, July 14, 2010 4:13:27 PM

Page 2

Item ID: D4132-041

Revision ID:

Item Name: Wearplate, LH Fwd

Start Date: 6/29/2010 Start Qty: 2.00

Required Date: 7/15/2010 Req'd Qty: 2.00

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Setup

Start

Stop

Run

Start

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130



Brake NC

Brake NC

Form as per dwg  
NC BRAKE

0.00

Memo

1- Form using DT *N/A* Die as per Dwg D4132

0.00

*10-07-14*

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

*10-07-14*

150



Large Fab

Large Fab

Weld per dwg A/R Hardcoat S.S. Batch: *1114705*  
Large Fab

0.00

Memo

Weld hard surface using DT *N/A* as per QSI 004 and Dwg D4132

0.00

*10-07-14* 1 *φ*

W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:			WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP		Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
				Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



# Work Order ID 60162

June 28, 2010 11:49:20 AM



Page 3

Item ID: D4132-041

Revision ID:

Item Name: Wearplate, LH Fwd

Start Date: 6/29/10 Start Qty: 2.00

Required Date: 7/15/10 Req'd Qty: 2.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Run Start



Stop



Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

0.00

Memo

8/10/15



170



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

Memo

10-07-14

180



Powdercoat

Powder Coating

Grey Sandtex(Ref:4,3,5,6) per QSI005-4.3

0.00

0.00

Memo

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

11/25/88

12:00 370°  
12:30

10-7-15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Work Order ID 60162

June 28, 2010 11:49:21 AM

Item ID: D4132-041

Revision ID:

Item Name: Wearplate, LH Fwd

Start Date: 6/29/10 Start Qty: 2.00

Required Date: 7/15/10 Req'd Qty: 2.00

Reference:

Approvals: Process Plan:

QC:

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Setup Start

Stop

Run Start

Stop

Sequence ID/  
Work Center ID

190



QC

Quality Control

Operation  
Description

QC3- Inspect Part Finish

Memo

Set Up/  
Run Hours

0.00

0.00

0.00

0.00

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

10/07/15

41

0

200



Small Fab

Small Fab

Memo

1- Bond D4132-3 gasket to inner surface of wearplate using a thin layer of 3M  
1300/1300L scotch grip adhesive  
Batch: M113174

7 m.d

10/07/15

210



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

10-07-15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Work Order ID 60162

June 28, 2010 11:49:21 AM



Page 5

Item ID: D4132-041

Revision ID:

Item Name: Wearplate, LH Fwd

Start Date: 6/29/10 Start Qty: 2.00

Required Date: 7/15/10 Req'd Qty: 2.00

Reference:

Approvals: Process Plan:

QC:

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Setup Start

Stop

Run Start

Stop

Sequence ID/  
Work Center ID

220



Packaging

Packaging

Operation  
Description

Identify as per dwg & Stock Location:

Packaging

Memo

Set Up/  
Run Hours

0.00

0.00

Tool ID Tool # Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

600/7/16

230



QC

Quality Control

QC21-Final Inspection - Work Order Release

Memo

0.00

0.00

10-7-16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

June 28, 2010 11:49:19 AM

Work Order ID: 60162

Parent Item: D4132-041

Parent Item Name: Wearplate, LIL Fwd



Start Date: 6/29/10

Start Qty: 2.00

Required Date: 7/15/10

Required Qty: 2.00

Comments: IPP Rev:A 10.06.24 new issue DD ver:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D4132-3



Gasket

M304S18GA



304/316 .050 Sheet

Manufactured

No

200

Each

0.0000

B60303



(2x) m.f w/o r/s

Purchased

No

100

sf

132.8779

1.555

3.273684

4665

18 10-6 79

Location

MA120

Loc Qty

132.8779

Loc Code

111743

8.86

112885

28.0179

113062

96

113007

B

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

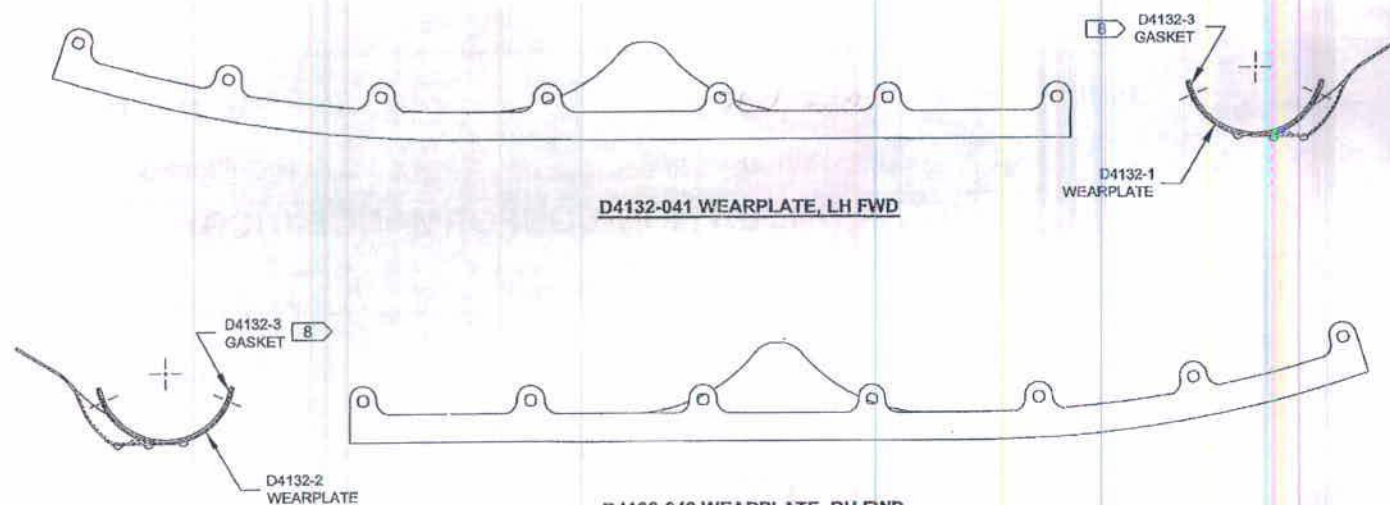
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



UNCONTROLLED  
SUBJECT TO AMENDMENTS  
NO. 00162  
0010629

QTY	QTY	PART NUMBER	DESCRIPTION
-041	-042		
X		D4132-041	WEARPLATE, LH FWD
	X	D4132-042	WEARPLATE, RH FWD
1		D4132-1	WEARPLATE
1		D4132-2	WEARPLATE
1		D4132-3	GASKET
A/R	A/R	1300 / 1300L	3M SCOTCH-GRIP ADHESIVE



D4132-041 WEARPLATE, LH FWD

D4132-042 WEARPLATE, RH FWD

RELEASED  
2010-06-23

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4132-xxx" USING YELLOW PAINT MARKER ON INNER SURFACE
- 7) WEIGHT: -041/-042 = 2.1 lbs
- 8) BOND D4132-3 GASKET TO INNER SURFACE OF WEARPLATE USING A THIN LAYER OF 3M 1300/1300L SCOTCH GRIP ADHESIVE

REV.	NEW ISSUE	DESCRIPTION	CP	10.08.15
DESIGN			BY	DATE
DRAWN				
CHECKED				
MFG. APPR.				
APPROVED				
DE APPR.				
DATE	10.08.15			

DART AEROSPACE USA, INC  
PORT HADLOCK, WA

DRAWING NO. D4132

TITLE WEARPLATE, FWD

SCALE NTS

REV. A SHEET 1 OF 6

COPYRIGHT © 2015 BY DART AEROSPACE USA, INC

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED TO THE AIR FORCE CONTRACTOR FOR USE ONLY. IT IS NOT TO BE USED FOR ANY PURPOSES OR DISCLOSED TO ANY OTHER INDIVIDUALS WITHOUT PERMISSION FROM DART AEROSPACE USA, INC.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

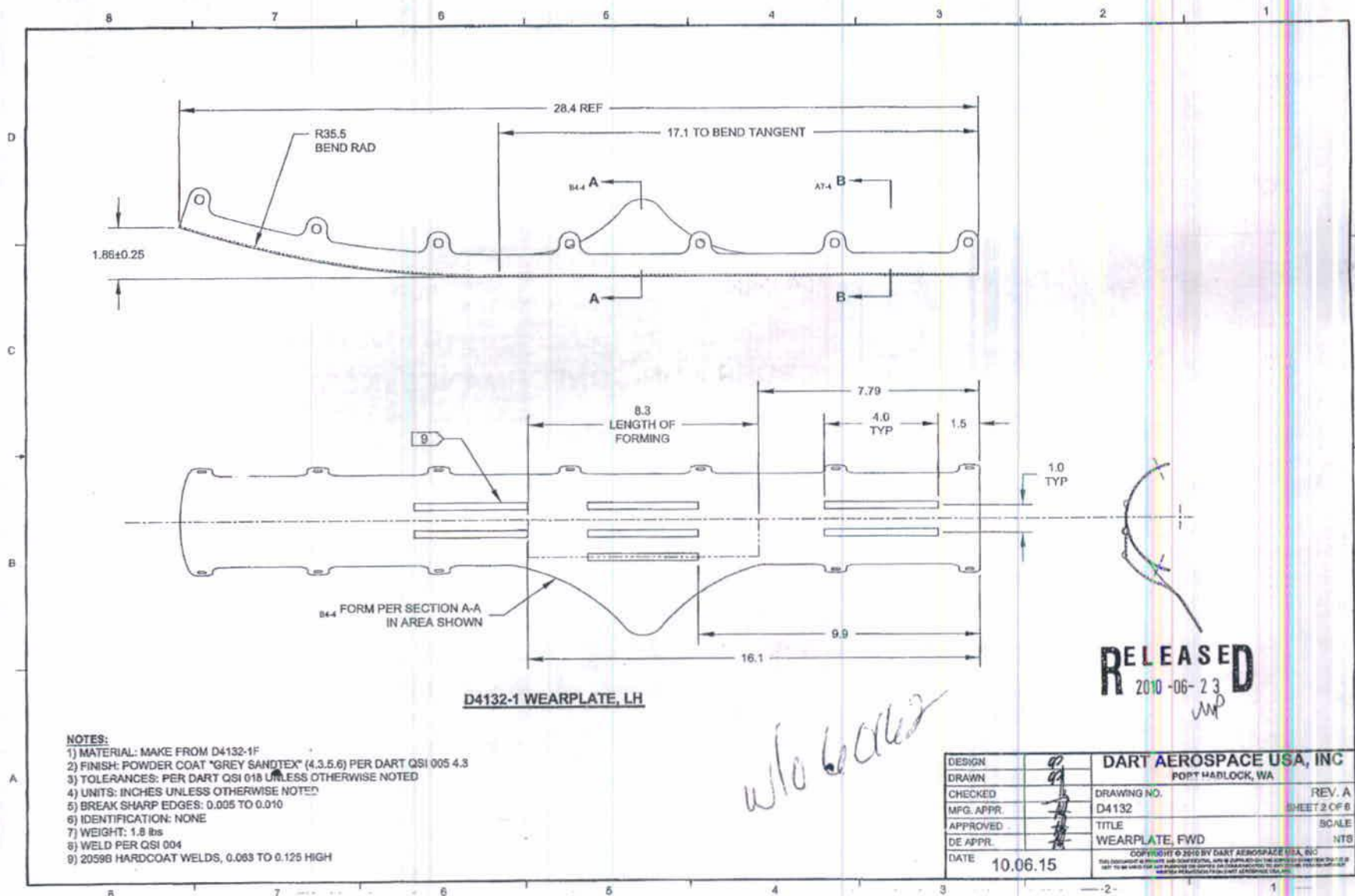
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





DESIGN	9	<b>DART AEROSPACE USA, INC</b>	
DRAWN	91	PORT HADLOCK, WA	
CHECKED	91	DRAWING NO.	REV. A
MFG. APPR.	91	D4132	SHEET 2 OF 8
APPROVED	91	TITLE	SCALE
DE APPR.	91	WEARPLATE, FWD	NTS
DATE	10.06.15	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

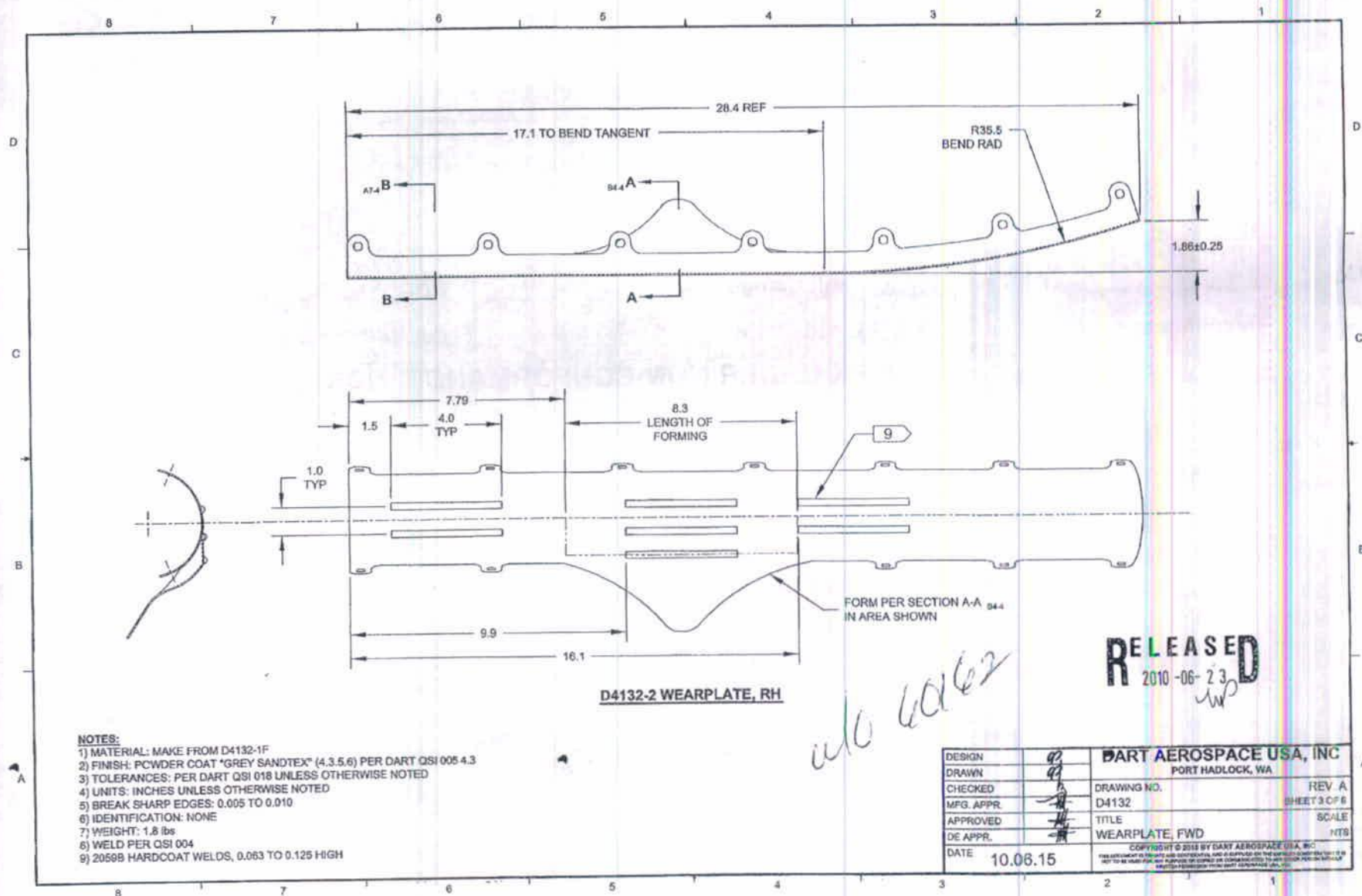
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries







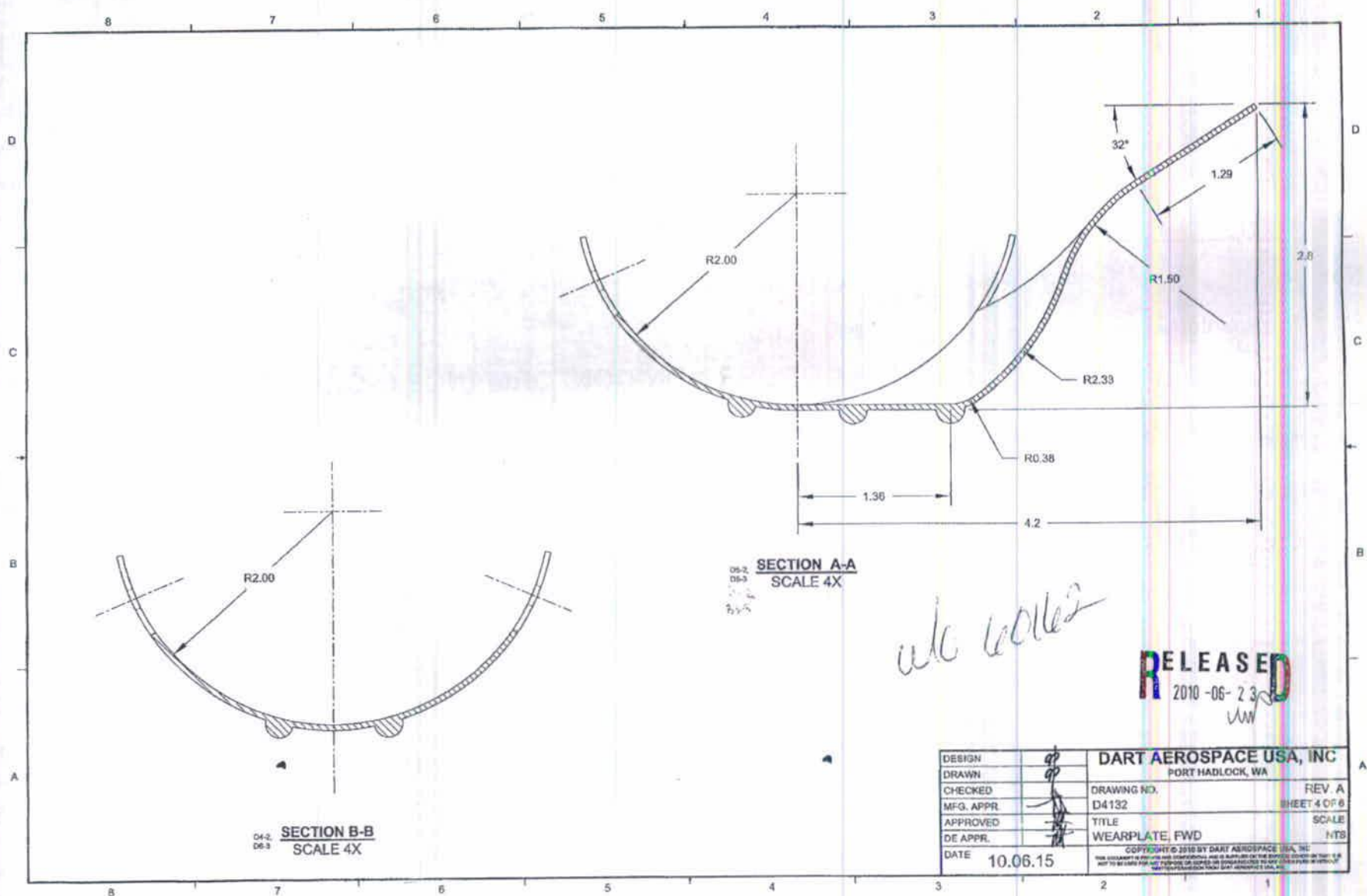
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



DESIGN		DART AEROSPACE USA, INC	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4132	SHEET 4 OF 6
APPROVED		TITLE	SCALE
DE APPR.		WEARPLATE, FWD	NTS
DATE	10.06.15	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

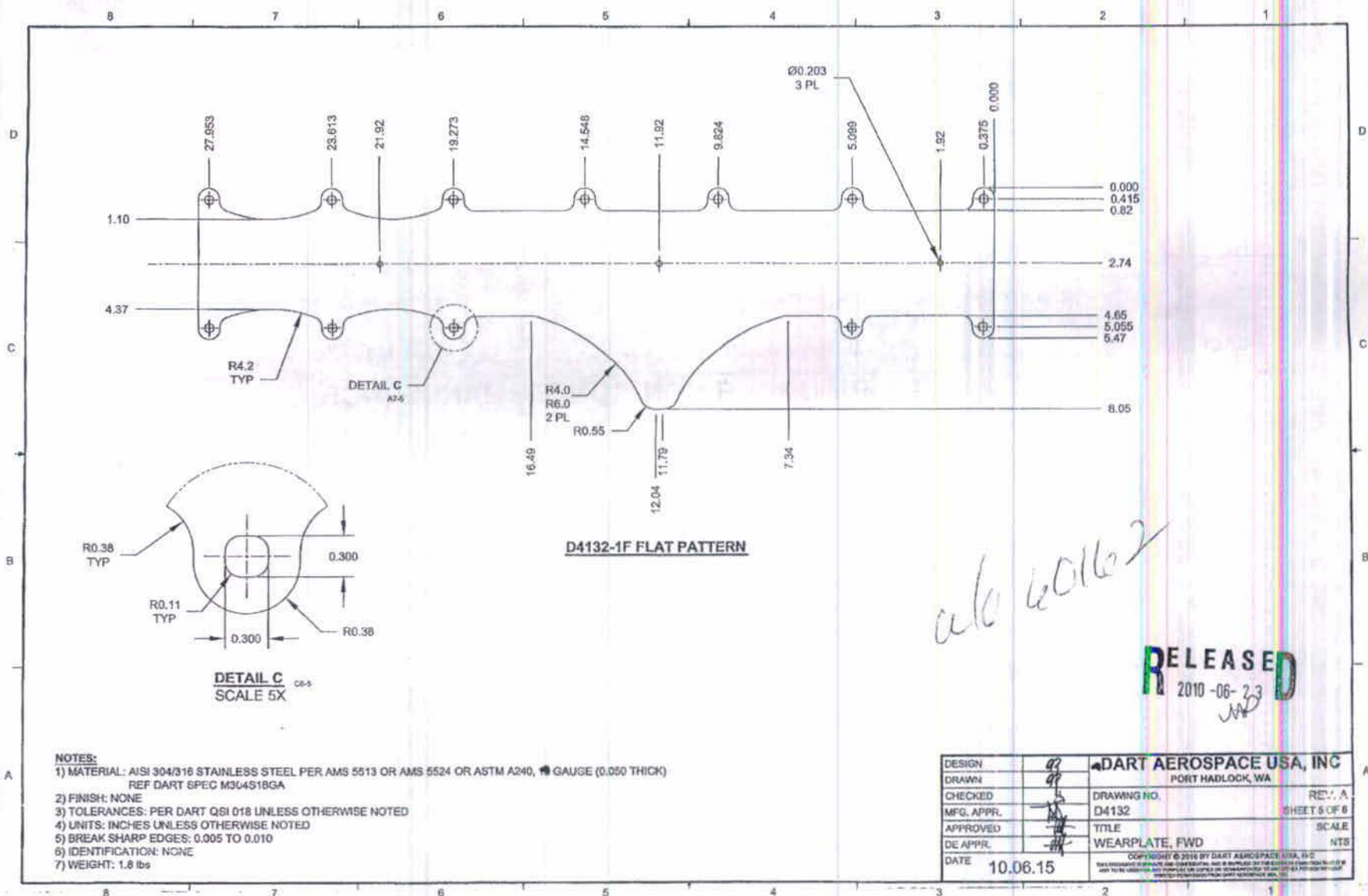
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





RELEASED  
2010-06-23

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

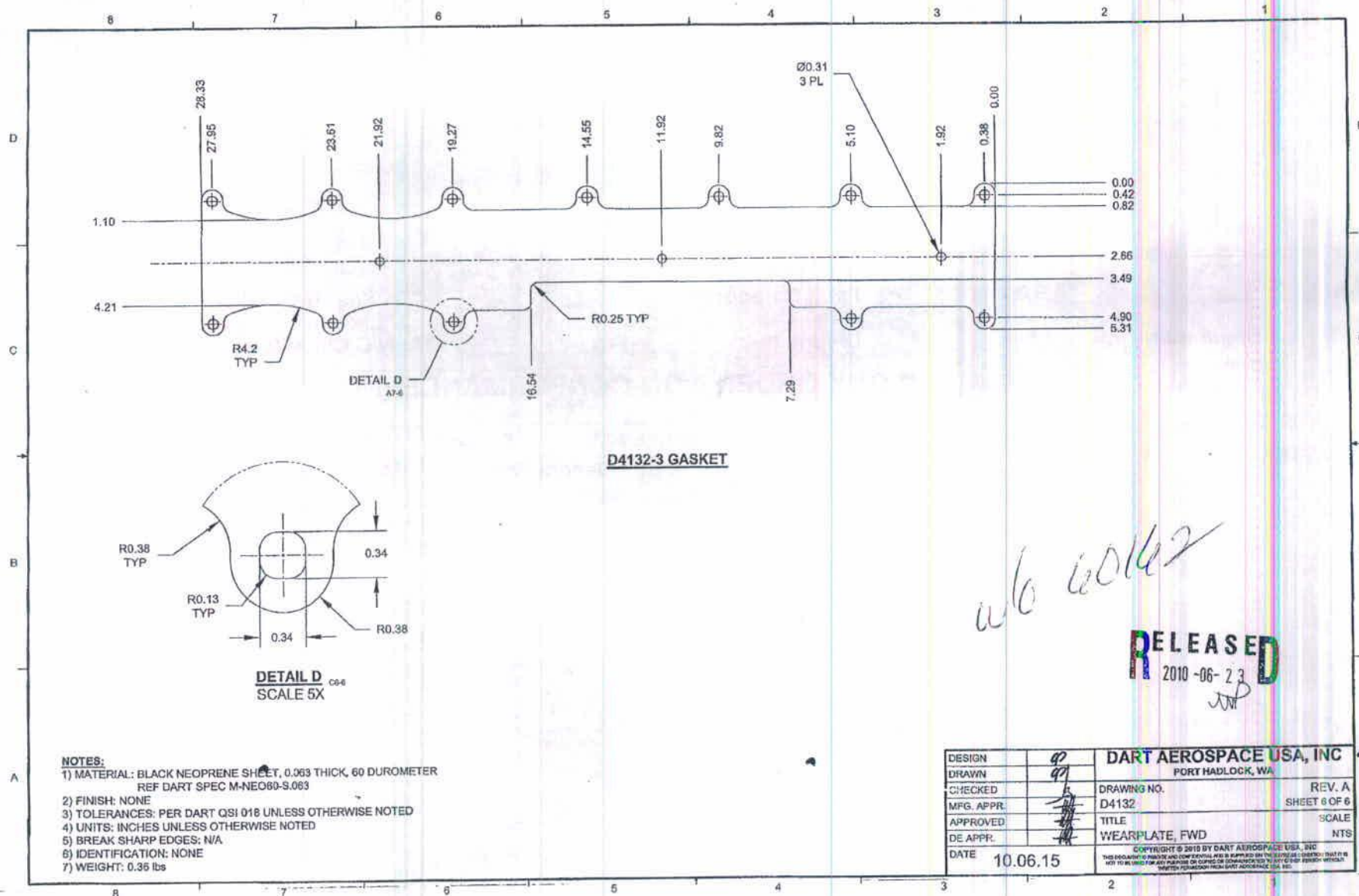
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries







W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

**NOTE:** Date & initial all entries

DART AEROSPACE LTD		Work Order: 60162
Description: WEARPLATE LH FWD		Part Number: D413.7-641
Inspection Dwg: D413.7-1 Rev: #		Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
300X300	± .010	303X303	X			
Ø .703	+ .005 - .001	.704	X			
.415	± .010	.413	X			
.82	± .030	.823	X			
2.74	± .030	2.731	X			
4.65	± .030	4.638	X			
5.055	± .010	5.054	X			
5.47	± .030	5.467	X			
8.05	± .030	8.043	X			
.315	± .010	.377	X			
1.92	± .030	1.917	X			
5.094	± .010	5.099	X			
9.824	± .010	9.824	X			
11.92	± .030	11.92	X			
14.548	± .010	14.549	X			
19.273	± .010	19.273	X			
21.42	± .030	21.42	X			
23.613	± .010	23.613	X			
27.953	± .010	27.953	X			
1.10	± .030	1.092	X			
4.37	± .030	4.361	X			
11.79	± .030	11.79	X			
17.04	± .030	17.04	X			
.050	± .010	.050	X			

Measured by: KB
Date: 10-6-29

Audited by: J
Date: 10/6/30

Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	



W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

**NOTE:** Date & initial all entries



Dart Aerospace Ltd

W/O: .

## WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10/07/13	130	Lead to open hole at .311 to match the jig	S	10/07/13	3	10.07.13 PSI	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:

## WORK ORDER NON-CONFORMANCE (NCR)

DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

Date & initial all entries